

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of producing a transgenic shrimp, ~~said method nucleic acid molecule delivery into a fertilized shrimp egg~~ comprising:
providing a fertilized shrimp egg prior to its formation of a protective layer;
providing a nucleic acid molecule; and
combining the nucleic acid molecule and the fertilized egg under conditions effective to allow the nucleic acid molecule to be delivered into the egg without removing the protective layer, thereby yielding a transgenic shrimp having the nucleic acid molecule integrated into the genomic DNA of said transgenic shrimp.
2. (Currently Amended) The method according to claim 1, wherein the nucleic acid molecule is heterologous to the ~~egg~~ transgenic shrimp.
3. (Currently Amended) The method according to claim 1, wherein the nucleic acid molecule is homologous to the ~~egg~~ transgenic shrimp.
4. (Original) The method according to claim 1, wherein the nucleic acid molecule is in an expression vector.
5. (Original) The method according to claim 4, wherein the expression vector is a linear vector.
6. (Original) The method according to claim 4, wherein the expression vector is a circular vector.
7. (Original) The method according to claim 4, wherein the expression vector comprises a label.

8. (Original) The method according to claim 7, wherein the label is selected from the group consisting of a radio-active label, a fluorescent label, a chemiluminescent label, and a biotinylated label.

9. (Original) The method according to claim 1, wherein the nucleic acid molecule comprises a label.

10. (Original) The method according to claim 9, wherein the label is selected from the group consisting of a radio-active label, a fluorescent label, a chemiluminescent label, and a biotinylated label.

11-13 (Canceled)

14. (Original) The method according to claim 1, wherein said combining comprises:

combining a transfection reagent with the nucleic acid molecule and the fertilized egg.

15. (Original) The method according to claim 14, wherein the transfection reagent is selected from the group consisting of a cationic lipid reagent, a liposomal cationic lipid reagent, a cationic non-liposomal lipid reagent, an activated dendrimer reagent, and a cationic polyethyleneimine reagent.

16. (Original) The method according to claim 15, wherein the transfection reagent is a cationic polyethyleneimine.

17. (Original) The method according to claim 15, wherein the transfection reagent is a linear cationic polyethyleneimine reagent.